

ORDINANCE NO. 11-001

**AN ORDINANCE OF THE COUNTY OF ORANGE, CALIFORNIA,
REPEALING THE INTERNATIONAL BUILDING CODE, 2006
EDITION; REPEALING ORDINANCE 08-005 AND ADOPTING BY
REFERENCE THE CALIFORNIA BUILDING CODE, 2010 EDITION;
THE INTERNATIONAL BUILDING CODE, 2009 EDITION; THE
CALIFORNIA RESIDENTIAL CODE, 2010 EDITION; AND THE
CALIFORNIA GREEN BUILDING STANDARDS CODE, 2010,
EDITION; WITH AMENDMENTS THERETO.**

The Board of Supervisors of the County of Orange, California, ordains as follows:

SECTION 1. Article 2 of Division 1 of Title 7 of the Orange County Codified Ordinances is hereby repealed.

SECTION 2. Article 2 of Division 1 of Title 7 of the Orange County Codified Ordinances is hereby added to read as follows:

ARTICLE 2. BUILDING AND STRUCTURES

Section 7-1-12. ADOPTION OF CALIFORNIA BUILDING CODE, INTERNATIONAL BUILDING CODE, CALIFORNIA RESIDENTIAL CODE, AND CALIFORNIA GREEN BUILDING STANDARDS CODE.

a. The Board of Supervisors of the County of Orange hereby adopts the California Building Code, 2010 Edition and the International Building Code, 2009 Edition, as published by the International Code Council, including Division II of Chapter 1 Administration, Appendix C, Appendix I, except Chapters 1, 11, 27, 28, 29 in the text of the International Building Code, except such portions as are deleted, modified, or amended in this Article. Chapter 1 of the International Building Code is replaced with Division II of Chapter 1 of the California Building Code with County amendments.

The Board of Supervisors of the County of Orange hereby adopts the California Residential Code, 2010 Edition. Division II of Chapter 1 of the California Residential Code is replaced with Division II of Chapter 1 of the California Building Code with County amendments.

The Board of Supervisors of the County of Orange hereby adopts the California Green Building Standards Code, 2010 Edition. Chapter 1 of the California Green Code is added with Division II of Chapter 1 of the California Building Code with County amendments.

1 b. The purpose of these codes is to prescribe regulations for the erection, construction,
2 enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use,
3 height, area and maintenance of all buildings and structures.

4 c. Not less than one (1) copy of each has been made and is now filed in the office of the OC Public
5 Works. They are hereby adopted and incorporated as if set forth at length herein. Whenever there is a
6 difference between the California Code and the International Code, the California Code shall prevail.

7 Section 7-1-13. SECTION 101.1 OF DIVISION II of CHAPTER 1 AMENDED.

8 Section 101.1 of Division II of Chapter 1 of the 2010 California Building Code is hereby amended
9 to read as follows:

10 TITLE

11 Section 101.1 these regulations shall be known as the Orange County Building
12 Code, hereinafter referred to as "this Code".

13 Section 7-1-14. SECTION 101.2 AND SECTION 101.4 OF DIVISION II OF CHAPTER 1 AMENDED.

14 Section 101.2 and Section 101.4 Division II of Chapter 1 of the 2010 California Building Code is
15 hereby amended to read as follows:

16 SCOPE

17 Section 101.2. The provisions of this Code shall apply to the construction, alteration, movement,
18 enlargement, replacement, equipment, location, removal, demolition, repair, maintenance and use and
19 occupancy of any building or structure within the unincorporated area of the County, and County-owned
20 buildings and structures within incorporated cities, except work located primarily in a public way, public
21 utility towers and poles, mechanical equipment not specifically regulated in this Code, and hydraulic
22 flood control structures.

23 For additions, alterations, movement and maintenance of buildings and structures see Chapter
24 34. For temporary buildings and structures, see Section 3103.

25 Where, in any special case, different sections of this Code specify different materials, method of
26 construction or other requirements, the most restrictive shall govern. Where there is a conflict between

1 a general requirement and a specific requirement, the specific requirement shall be applicable.

2 Wherever in this Code reference is made to the Appendix, the provisions in the Appendix shall not
3 apply unless specifically adopted.

4 Section 101.4.1 The other codes listed in Section 101.4.1 through 101.4.6 and referenced
5 elsewhere in the Code shall be considered part of the requirements of the Code to the prescribed extent
6 of each such reference.

7 Section 101.4.1 Gas. The provisions of the California Plumbing Code shall apply to the installation
8 of gas piping from the point of delivery, gas appliances and related accessories as covered in this Code.
9 These requirements apply to gas piping systems extending from the point of delivery to the inlet
10 connections of appliances and the installation and operation of residential and commercial gas
11 appliances and related accessories.

12 Section 101.4.2 Mechanical. The provisions of the California Mechanical Code shall apply to the
13 installation, alterations, repairs and replacement of mechanical systems, including equipment,
14 appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-
15 conditioning and refrigeration systems, incinerators and other energy-related systems.

16 Section 101.4.3 Plumbing. The provisions of the California Plumbing Code shall apply to the
17 installation, alteration, repair and replacement of plumbing systems, including equipment, appliances,
18 fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects
19 of a medical gas system. The provisions of the California Plumbing Code shall apply to private sewage
20 disposal systems.

21 Section 101.4.4 Property Maintenance. The provisions of the California Building Code shall apply
22 to existing structures and premises; equipment and facilities; light, ventilation, space heating,
23 sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and
24 occupancy of existing premises and structures.

25 Section 104.4.5 Fire Prevention. The provisions of the California Fire Code shall apply to all
26 matters affecting or relating to structures, processes and premises from the hazard of fire and explosion

1 arising from storage, handling or use of structures, materials or devices; from conditions hazardous to
2 life, property or public welfare in the occupancy of structures or premises; and from the construction,
3 extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the
4 structure or on the premises from occupancy or operation.

5 Section 101.4.6 Energy. The provisions of the California Energy Code, Title 24, Part 6 shall apply
6 to all matters governing the design and construction of buildings for energy efficiency.

7 *Exception: [OSHPD 1,2 & 4] Not required by OSHPD*

8 Section 7-1-15. SECTION 101.5 OF DIVISION II OF CHAPTER 1 ADDED.

9 Section 101 of Division II of Chapter 1 of the 2010 California Building Code is hereby amended by
10 adding Section 101.5 to read as follows:

11 UNDERGROUND UTILITIES REQUIRED

12 Section 101.5. The Building Official shall, as a condition precedent to the issuance of a Building
13 Permit, require all utility services located within the exterior boundary lines of lot or parcel of property to
14 be installed underground if:

- 15 (1) The property is to be developed with a new or relocated main building;
- 16 (2) The remodeling, alteration, or addition to an existing main building, exceeds 50 percent of
17 the value and/or area of the existing building;
- 18 (3) A residential building or use is converted to any nonresidential use or purpose.

19 For purposes of this section, the term "main building" shall mean a building in which is conducted
20 the principal use of the lot or building site on which it is located.

21 The owner or developer of the property is responsible for complying with the requirements of
22 this section and shall provide all necessary facilities on the property to receive such service from the
23 supplying utilities.

24 If it is determined that practical difficulties, or unreasonable hardships inconsistent with the
25 purposes of this chapter and unique to a particular parcel of property, would result from the literal
26 interpretation of this section, the Building Official may waive, modify or delay the imposition of an

1 underground requirement imposed pursuant to this section upon written application of any affected
2 property owner. The Building Official shall notify the applicant of his decision in writing by certified mail.
3 If the Building Official determines to delay the installation of required underground utilities, he may
4 require a recorded agreement guaranteeing the future performance of the work, together with adequate
5 performance security enforceable by the County in the form of a cash deposit, bond, letter of credit, or
6 other instrument satisfactory to the County Counsel.

7 For purposes of this section, appurtenances and associated equipment such as, but not limited
8 to, surface-mounted transformers, pedestal-mounted terminal boxes and meter cabinets, and concealed
9 ducts in an underground system, may be placed above ground.

10 Any person dissatisfied with the decision of the Building Official may file an appeal with the
11 Hearing Officer within fifteen (15) days after the decision of the Building Official is deposited in the mail
12 by filing a written statement setting forth the reasons for said appeal with the County Clerk. The
13 Hearing Officer may overrule, modify, or affirm the decision of the Building Official.

14 Section 7-1-16. SECTION 116 OF DIVISION II OF CHAPTER 1 REPLACED.

15 Section 116 of Division II of Chapter 1 of the 2010 California Building Code is hereby replaced to
16 read as follows:

17 UNSAFE BUILDING, NUISANCES, NOTICE, ADMINISTRATIVE HEARING, APPEAL.

18 Section 116. (a) Unsafe Buildings. All buildings or structures which are structurally unsafe or not
19 provided with adequate egress, or which constitute a fire hazard, or are otherwise dangerous to human
20 life, or which in relation to existing use constitute a hazard to safety or health or public welfare, by
21 reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster damage, or
22 abandonment, as specified in this Code or in any other effective ordinance or statute, are, for the
23 purpose of this section, unsafe buildings and constitute an unsafe condition. All such unsafe buildings or
24 conditions are hereby declared to be public nuisances and shall be abated by repair, rehabilitation,
25 improvement, removal, or demolition, in whole or part, in accordance with the procedures specified in
26 this section.

1 (b) Fire Hazard. No person, including but not limited to the state and its political
2 subdivisions, operating any occupancy subject to these regulations shall permit any fire hazard, as
3 defined in this section, to exist on premises under their control, or fail to take immediate action to abate
4 a fire hazard when requested to do so by the enforcing agency.

5 NOTE: "Fire hazard" as used in these regulations means any condition, arrangement or act which
6 will increase, or may cause an increase of the hazard or menace of fire to a greater degree than
7 customarily recognized as normal by persons in the public service of preventing, suppressing or
8 extinguishing fire; or which may obstruct, delay or hinder, or may become the cause of obstruction,
9 delay or hindrance to the prevention, suppression or extinguishment of fire.

10 (c) Inspection. The Building Official shall examine or cause to be examined every building
11 or structure or portion thereof or other condition reported as unsafe, dangerous, damaged, or otherwise
12 constituting a hazard as set forth in subsection (a) of this section. Said examination shall be conducted
13 in accordance with the provisions of this Code, other applicable statutes, and the ordinances, rules, and
14 regulations of the County of Orange.

15 (d) Notice of Defects. In any case where this section is made applicable by reference or if
16 any building, structure, or part thereof is found to be an unsafe building as defined in this section, the
17 Building Official shall give notice, setting forth the defects found, to the owner, other responsible
18 person, or authorized representative, hereinafter referred to as "owner," of such building or structure.
19 The notice shall also set forth the right of the owner to be present at an administrative hearing, at his
20 option, and introduce such relevant evidence on the issues as he desires. The notice shall also set forth
21 the requirements of commencement and completion of work and the effect of failure to so do as set
22 forth in subsections (g) and (h) of this section.

23 (e) Time and Place of Hearing, Evidence. The notice shall set forth the time and place a
24 hearing shall be had before the Building Official. At the time and place so specified, evidence shall be
25 submitted as to the facts of any such defects as to reasonably establish their existence and the Building
26 Official shall determine whether the facts so established constitute an unsafe building. Evidence may

1 further be submitted as to the repairs, rehabilitation, improvements, removal or demolition considered
2 necessary to correct said defects.

3 (f) Order, Finality, Appeal.

4 (1) At the hearing and upon the determination of the existence of defects, the
5 Building Official shall determine whether such defects are subject to repair, rehabilitation, or
6 improvement, or whether they are of such a nature as to require removal or demolition of a part of or
7 the whole of any such building or structure, and he shall order such repairs, rehabilitation,
8 improvements, or demolition as is considered necessary in the case.

9 (2) The determination and order may be made orally at the hearing and shall be
10 written and transmitted to the owner within a reasonable time; the determination and order shall
11 become final within five (5) days, excluding Saturday, Sunday, and holidays, from the time it is first
12 rendered, or in the event that the owner was not present at the hearing, within five (5) days of the
13 mailing of the order to the last known address of said owner, responsible party, or representative,
14 whichever first occurs.

15 (3) Appeal. The owner shall, if he desires to do so, at any time prior to the
16 determination and order becoming final as heretofore set forth, appeal the decision of the Building
17 Official to the Hearing Officer, and shall thereupon make a determination and order affirming, reversing,
18 or modifying the determination and order of the Building Official as the Hearing Officer may deem
19 proper. The order of the Hearing Officer shall be immediately final.

20 (g) Commencement and Completion of Work. The owner shall, upon the expiration of five
21 (5) days, excluding Saturday, Sunday, and holidays, following the finality of the determination and order
22 of the Building Official (or, if appealed, the determination and order of the Hearing Officer) commence
23 the repairs, rehabilitation, improvements, removal, or demolition ordered, and such work shall be
24 completed within the time specified by the Building Official (or the Hearing Officer, if appealed).

25 (h) Failure of Commencement of Work. If the owner neglects or fails to commence, within
26 the time provided therefore, activity and the corrective work deemed necessary and as ordered, the

1 Building Official may cause the ordered repairs, rehabilitation, or improvements to be performed
2 forthwith and any cost thereof shall be a charge and expense against the owner personally and
3 collectible by an action at law.

4 (i) Right to Demolish. In case the owner shall fail, neglect, or refuse to comply with the
5 notice or order to remove or demolish said building or structure or portion thereof, the Board of
6 Supervisors of the County of Orange may order the Building Official to proceed with the work specified
7 in the notice or order. A statement of the cost of such work shall be transmitted to the Board of
8 Supervisors, who shall cause the same to be paid and levied as a special assessment against the
9 property. The Building Official may apply to the Board of Supervisors for an order under this subsection
10 to proceed with the work specified in subsection (h) above where such work is not deemed by him to
11 require emergency action.

12 (j) Costs incurred under subsections (h) and (i) shall be paid by the County. Such costs
13 shall be charged to the owner of the premises involved. The Building Official may apply to the Board of
14 Supervisors to cause the costs for such work specified in subsection (h), and shall make such application
15 for costs incurred under subsection (i), to be paid and levied as a special assessment against the
16 property and collected in the manner provided for special assessments.

17 (k) Vacation of Premises, posting of signs. If necessary, the notice shall require the
18 building or structure or portion thereof or other site to be vacated forthwith, and within the time
19 specified, in the interest of immediate public safety pending the finality of any determination and order.

20 The Building Official shall cause to be posted at each entrance to such building a notice to
21 prohibit occupancy.

22 Such notices shall remain posted until the corrected conditions, required repairs, rehabilitation,
23 removal or demolition are completed and a Certificate of Occupancy is issued as set forth in this Code.

24 Such posted notices shall not be removed without written permission of the Building Official, and
25 no person shall enter the building except for the purpose of making the required repairs or of
26 demolishing the building. The notice required by this section may be served either:

1 (1) By delivering a copy to the owner or authorized representative as designated on
2 papers, applications, or permits on file with the Building Official, personally; or

3 (2) If either or both be absent from his place of residence and from his usual or
4 designated place of business, by leaving a copy with some person of suitable age and discretion at
5 either place, and sending a copy of certified mail, receipt requested, addressed to the owner or
6 authorized representative at his place of residence; or

7 (3) If such place of residence and business cannot be ascertained, or a person of suitable
8 age or discretion there cannot be found, then by affixing a copy in a conspicuous place on the property,
9 building structure, and also delivering copy to a person there residing, if any; to the person in charge, if
10 any; and also sending a copy by certified mail, return receipt requested, addressed to the owner at the
11 place where the property, building, or structure is situated, or to the owner at his last known or
12 designated address, or both.

13 Section 7-1-17. SECTION 105.2 OF DIVISION II OF CHAPTER 1 AMENDED.

14 Section 105.2 of Division II of Chapter 1 of the 2010 California Building Code is hereby amended
15 to replace items 1 and 2, and add item 14 as follows:

16 (1) One-story detached accessory buildings used as tool and storage sheds, play houses
17 and similar uses, provided the floor area does not exceed 120 square feet, and the structure is at least 3
18 feet from property line and 6 feet from other buildings or structures located on the same property.

19 (2) Fences not over six (6) feet high. Exception: Walls and fences less than six (6) feet in
20 height which are required as a condition of project approval to have permits.

21 (14) Other incidental structures and improvements of a minor nature may be exempt from
22 the provisions of this Code upon the determination of the Building Official.

23 Note: The balance of Section 105.2 is implemented as written.

24 Section 7-1-18. SECTION 105.3 OF DIVISION II OF CHAPTER 1 AMENDED.

25 Section 105.3 of Division II of Chapter 1 of the 2010 California Building code is hereby amended
26 to read as follows:

1 Section 105.3 Application for permit. A separate permit shall be required for each building or
2 structure. To obtain a permit, the applicant shall first file an application therefore in writing on a form
3 furnished by the OC Public Works for that purpose. Such application shall:

- 4 1. Identify and describe the work to be covered by the permit for which application is made.
- 5 2. Describe the land on which the proposed work is to be done by legal description, street
6 address or similar description that will readily identify and definitely locate the proposed
7 building or work.
- 8 3. Indicate the use and occupancy for which the proposed work is intended.
- 9 4. Be accompanied by construction documents and other information as required in Section 107.
- 10 5. State the valuation of the proposed work.
- 11 6. Be signed by the applicant, or the applicant's authorized agent.
- 12 7. Give such other data and information as required by the Building Official.

13 Note: The balance of Section 105.3 is implemented as written, except Section 105.3.2 is deleted
14 Section 7-1-19. SECTION 105.5 OF DIVISION II OF CHAPTER 1 REPLACED.

15 Section 105.5 of Division II of Chapter 1 of the 2010 California Building Code is hereby replaced
16 as follows:

17 PERMIT EXPIRATION

18 Section 105.5 Expiration. Every permit issued by the Building Official under the provisions of this
19 Code shall expire by limitation and become null and void if the building or work authorized by such
20 permit is not commenced within one hundred eighty (180) days from the date of such permit, or if the
21 building or work authorized by such permit is suspended or abandoned at any time after the work is
22 commenced for a period of one hundred eighty (180) days. Before such work can be commenced or
23 recommenced, a permit shall first be extended or re-issued.

24 1) Requesting extension of an unexpired permit: Any permittee holding an unexpired permit or
25 a permit which has expired for less than 180 days may apply for an extension of time within which
26 permittee may commence work under that permit when he/she is unable to commence or recommence

1 work within the time required by this section for good and satisfactory reasons. The Building Official
2 may extend the time for action by the permittee for a period not exceeding one hundred eighty (180)
3 days upon written request by the permittee showing that circumstances beyond the control of the
4 permittee have prevented action from being taken. Permits extended in this manner shall not be subject
5 to new regulations adopted after issuance of the permit. Fees for time extension shall be as established
6 by the Board of Supervisors. Fees shall not be required for first extension.

7 (2) Requesting re-issuance of a permit which has been expired for 180 days or more: Any
8 permittee holding a permit which has been expired for 180 days or more may apply for re-issuance of
9 the permit subject to compliance with current regulations and payment of full plan check and permit
10 fees. Plans must be re-submitted for plan check. Portions of the structure which have been built under
11 the expired permit shall not be subject to current regulations.

12 (3) For the purpose of permit extension, multiple permits of the same structure such as
13 building, foundation, retaining wall, plumbing, mechanical, and electrical permits shall be considered as
14 one permit. Extension of building permit shall include extension of ancillary permits of the same
15 structure. Each separate permit with work completed inspected and approved entirely prior to
16 suspension or abandonment shall not be subject to extension or re-issuance.

17 Section 7-1-20. SECTION 105.8 OF DIVISION II OF CHAPTER 1 ADDED.

18 Section 105 of Division II of Chapter 1 of the 2010 California Building Code is hereby amended by
19 adding Section 105.8 to read as follows:

20 Section 105.8 Change of Contractor or of Ownership. A permit issued hereunder shall expire
21 upon a change of ownership or a change of contractor regarding the building, structure or grading for
22 which said permit was issued if the work thereon has not been completed, and a new permit shall be
23 required for the completion of the work. If the provisions of section 105.5 above are not applicable and
24 if no changes have been made to the plans and specifications last submitted to the Building Official, no
25 charge, other than a "name change" and the permit issuance fee, shall be made for the issuance of the
26 new permit under such circumstances. If, however, changes have been made to the plans and

1 specifications last submitted to the Building Official, fees as established by the Board of Supervisors
2 shall be charged to the permit application.

3 Section 7-1-21. SECTION 109 OF DIVISION II OF CHAPTER 1 REPLACED.

4 Section 109 of Division II of Chapter 1 of the 2010 California Building Code is hereby replaced to
5 read as follows:

6 Section 109. FEES AND PLAN REVIEW

7 Section 109.1 General. A fee as established by the Board of Supervisors shall be paid for each
8 permit at time of issuance.

9 Section 109.2 Permit Fees. The determination of value or valuation under any of the provisions of
10 this Code shall be as established by the Board of Supervisors. The valuation shall be the total value of
11 all construction work for which the permit is issued, as well as all finish work, painting, roofing,
12 electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems and any other
13 permanent equipment.

14 Failure to pay fees and obtain a permit before commencing work shall be deemed a violation of
15 this Code, except when it can be proven to the satisfaction of the Building Official that an emergency
16 existed which made it impractical to first obtain the permit. A violation shall result in an assessment of
17 double fees for work done prior to permit issuance. Payment of a double fee shall not relieve any person
18 from fully complying with the requirements of this Code nor from any other penalties prescribed herein.

19 Section 109.3 Plan Review Fees. When a plan or other data is required to be submitted for plan
20 review, a plan-checking fee shall be paid at the time of submitting plans and specifications for checking.
21 Said plan-checking fee shall be established by the Board of Supervisors.

22 Section 109.4 Expiration of Plan Review. Application for which no permit is issued within 180 days
23 following the date of application shall expire by limitation, and plans and other data submitted for
24 review may thereafter be returned to the applicant or destroyed by the Building Official. The Building
25 Official may extend the time for action by the applicant for a period of 180 days on request by the
26 applicant showing that circumstances beyond the control of the applicant have prevented action from

1 being taken. No application shall be extended more than once. In order to renew action on an
2 application after expiration, the applicant shall resubmit plans and pay a new plan review fee. Extension
3 or renewal of building permit application shall include extension or renewal of ancillary permit
4 applications of the same structure.

5 Section 109.5 Investigation Fee. An investigation fee as established by the Board of Supervisors
6 may be charged by the Building Official whenever work for which a permit is required by this Code has
7 been commenced without first obtaining said permit. This fee shall be paid and the investigation shall be
8 made prior to the issuance of any permit for said work. An investigation fee may be charged for any
9 investigation of a building, structure, work reports, certification or any other related work requested by
10 an owner or authorized agent of such owner.

11 Section 109.6 Fee Refunds. The Building Official may authorize refunding of fee which was
12 erroneously paid or collected.

13 Section 109.7 Additional Plan Review Fees. Where plans are incomplete or changed so as to
14 require additional plan checking, an additional plan checking fee as established by the Board of
15 Supervisors shall be paid. Said fee may be waived when in the opinion of the Building Official the
16 additional fee is not warranted.

17 Section 109.8 Conversion Inspection Fee. A fee as established by the Board of Supervisors shall
18 be paid when a conversion inspection is required by the Building Official.

19 Note: The conversion fees do not include the fees for the building permit, nor fees for electrical,
20 plumbing or heating and ventilating permits covering the alterations and/or repairs of the conversion.

21 Section 7-1-22. SECTION 111 OF DIVISION II OF CHAPTER 1 AMENDED.

22 Section 111 of Division II of Chapter 1 of the 2010 California Building Code is hereby amended to
23 read as follows:

24 Section 111. CERTIFICATE OF OCCUPANCY

25 Section 111.1 Use and Occupancy. No building or structure shall be used or occupied, nor shall
26 the gas or electrical systems be energized, until the Building Official has determined compliance with

1 this Code, all other applicable ordinances and laws and the conditions of the building permit, and has
2 authorized occupancy of such building or structure by the issuance of a Certificate of Occupancy
3 therefore as provided herein. No change in the existing occupancy classification of a building or
4 structure or portion thereof shall be made until the Building Official has issued a Certificate of
5 Occupancy therefore as provided herein.

6 *Exception: Gas and electrical systems may be energized prior to the issuance of a Certificate of*
7 *Occupancy when properly authorized by the Building Official for the purpose of testing systems or*
8 *equipment.*

9 111.2 Certificate Issue. After the Building Official inspects the building or structure and finds no
10 violation of the provisions of this Code or other applicable laws and regulations, the Building Official
11 shall issue a Certificate of Occupancy.

12 Issuance of a Certificate of Occupancy shall not be construed as an approval of a violation of the
13 provisions of this Code or of other ordinances of the jurisdiction. Certificates presuming to give authority
14 to violate or cancel the provisions of this Code or other ordinances of the jurisdiction shall not be valid.

15 Note: Sections 111.3 and 111.4 are implemented as written.

16 Section 7-1-23. SECTION 113 OF DIVISION II OF CHAPTER 1 REPLACED.

17 Section 113 of Division II of Chapter 1 of the 2010 California Building Code is hereby replaced to
18 read as follows:

19 HEARING OFFICER

20 Section 113.1 General. In order to determine the suitability of alternate materials and methods of
21 construction and to provide for reasonable interpretations of this Code, there shall be and is hereby
22 created a Hearing Officer. Hearing Officer shall be appointed by the Director of OC Public Works.

23 Section 7-1-24. SECTION 114 OF DIVISION II OF CHAPTER 1 AMENDED.

24 Section 114 of Division II of Chapter 1 of the 2010 California Building Code is hereby amended to
25 read as follows:

26 VIOLATIONS AND PENALTIES.

1 Section 114.1. It shall be unlawful for any person, firm, or corporation to erect, construct,
2 enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy, or maintain any
3 building or structure in the unincorporated area of the County of Orange, or cause or permit the same
4 to be done in violation of this Code.

5 Any person, firm, corporation violating any of the provisions of this Code shall be deemed guilty
6 of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and
7 every day or portion thereof during which any violation of any of the provisions of this Code is
8 committed, continued, or permitted, and upon conviction of any such violation such person shall be
9 punished by a fine of not more than Five Hundred Dollars (\$500) or by imprisonment for not more than
10 six (6) months, or by both such fine and imprisonment.

11 In addition to any such fine or imprisonment, the court may also require such party to correct of
12 mitigate the building violation to the satisfaction of the Building Official.

13 Section 114.1.1 In addition to the provisions of the subsections above, a notice of violation of this
14 Code may be recorded in accordance with the following procedures.

15 1. Notice of intent

16 A written notice of intent to record a notice of violation shall be served on the current
17 owner of record of the property. Such notice shall describe the property, the violation and the action
18 necessary to correct or mitigate the violation. The notice shall inform the owner that a notice of violation
19 will be recorded if the owner does not, within 20 days of receipt thereof, either correct the violation or
20 request a meeting with the Building Officials as set forth below. The notice shall include a copy of this
21 subsection 114.1.1 and be substantially as follows:

22 "Notice of Continuing Violation of the California and Orange County Building Code.

23 Notice is hereby given that the County of Orange has determined that a violation of the above
24 Code exists on the following described property (description). The violation consists of (description).

25 While a violation of the above Code exists, the County of Orange may refuse to approve
26 building or occupancy permits, subdivision maps, use permits, and other discretionary permits and

development approvals.”

2. Correction of Violation

If, within 20 days of receipt of a notice of intent, the owner corrects the violation, no notice of violation shall be recorded. The Building Official may grant extensions of time for good cause.

3. Meeting

If the owner requests a meeting, the Building Official shall schedule a meeting. Notice of the meeting shall be served on the owner not less than 15 days prior thereto. The Building Official may reschedule the meeting from time to time for a good cause with adequate notice to the landowner. At the meeting, the owner may be represented by counsel and may present any relevant evidence that violations do not exist.

4. Decision, Notice

Within 30 days following completion of the meeting, the Building Official shall issue and serve on the owner his determination as to whether or not a notice of violation will be recorded. This determination shall be supported by appropriate findings on all material issues raised at the meeting. The decision of the Building Official shall be final with respect to recordation of a notice of violation, but shall not affect other proceedings under Section 114.1.1.

5. Recordation

If the Building Official determines that a notice will be recorded, such notice shall be recorded 15 days or more days after service of notice of the decision.

6. Release of Notice

When a violation is corrected or mitigated to the satisfaction of the Building Official, if a notice of violation had been recorded, the Building Official shall cause a release to be recorded. Said release shall refer to the notice of violation and shall state that the violation described therein has been corrected.

Note: The balance of Section 114 is implemented as written, except Section 114.4 is deleted.

Section 7-1-25. SECTION 117 OF DIVISION II OF CHAPTER 1 ADDED.

Division II of Chapter 1 of the 2010 California Building Code is hereby amended by adding Section 117 to read as follows:

PLASTERING PERMITS, FEES

Section 117. It shall be unlawful for any person, firm or corporation, whether acting as principal, agent or employee, to do or cause or permit to be done any plastering work, interior or exterior, within the area covered by this Code without first obtaining a permit therefore from the Building Official, and further:

1. Every applicant for a permit to plaster shall state, in writing on the application form provided for that purpose, the character of the work proposed to be done and the amount and kind, together with such information pertinent thereto, as may be required.

2. Such applicant shall pay for each permit issued a fee as established by the Board of Supervisors.

3. Any person who shall commence on plastering work for which a permit is required by this Code without having first obtained a permit therefore, shall, if subsequently permitted to obtain a permit, pay double the fees fixed by this Code for such work.

Section 7-1-26. SECTION 1507.3 AMENDED.

Section 1507.3 of the 2010 California Building Code and the 2009 International Building Code is hereby amended to add Section 1057.3.11 as follows:

Section 1507.3.11. For the design of fasteners for tile roofing materials, the unincorporated area of the County shall be considered as a "Special Wind Region" with a basic wind speed over 80 miles per hour.

Note: The balance of Section 1507.3 is implemented as written.

Section 7-1-27. SECTION 1507 AMENDED

Section 1507 of the 2010 California Building Code and the 2009 International Building Code is hereby amended to add Section 1507.17 as follows:

1 Section 1507.17. The roof covering or roof assembly on any structure regulated by this Code shall
2 be as specified and classified in Chapter 15.

3 *Exceptions:*

- 4 1. *All new buildings and additions shall be minimum Class B roof.*
5 2. *Re-roofing, repairs or replacements on buildings shall be of the same classification as the*
6 *original roof except that non-rated and Class C roofs shall be a minimum Class C.*
7 3. *When any re-roofing, repair or replacement to an existing roof exceeds 40 percent of the*
8 *roof area, the entire roof shall be replaced with minimum class B roof.*
9 4. *Roofing on buildings located within Wildland – Urban Interface Fire Area shall be Class A*
10 *and meet additional requirements of Chapter 7A of the California Building Code.*

11 Note: The balance of Section 1507 is implemented as written.

12 Section 7-1-28. SECTION 1612.3 AMENDED.

13 Section 1612.3 of the 2010 California Building Code and the 2009 International Building Code is
14 hereby amended to insert:

15 NAME OF JURISDICTION: COUNTY OF ORANGE

16 DATE OF ISSUANCE: FEBRUARY 18, 2004

17 NOTE: The balance of Section 1612.3 is implemented as written.

18 Section 7-1-29. SECTION 1704.1 AMENDED.

19 SPECIAL INSPECTIONS

20 Section 1704.1 of the 2010 California Building Code and the 2009 International Building Code is
21 hereby amended to add Section 1704.1.3 as follows:

22 Section 1704.1.3 Special Inspector. The special inspector shall be a qualified person who shall
23 demonstrate competence, to the satisfaction of the Building Official, for inspection of the particular type
24 of construction or operation requiring special inspection.

25 Each person applying for listing as a special inspector for the OC Public Works of the County of
26 Orange shall provide evidence of experience and possess a valid Certification as a Special Inspector

1 issued by the International Code Council (ICC) or equivalent as determined by the Building Official for
2 each classification for which the person is applying.

3 A County of Orange registration card, which identifies the person as a special inspector in the
4 appropriate category, shall be issued to each such person that has successfully completed the
5 application and examination process as determined by the Building Official and upon payment of a
6 registration fee as established by the Board of Supervisors.

7 The annual renewal of the registration cards shall occur on renewal date of ICC certification or
8 equivalent for the classification being renewed. A renewal fee established by the Board of Supervisors
9 for each inspection category shall be charged. The application and renewal fee shall be accompanied by
10 appropriate evidence that the person's ICC or equivalent special inspector's certification is valid.

11 The Building Official may revoke any County of Orange special inspector's registration card at any
12 time for due cause by written notice. This notice shall set forth the time and place a hearing shall be
13 held before the Building Official at which time and place evidence would be submitted to show cause
14 why the registration card should not be withdrawn. Failure to appear at such hearing by the special
15 inspector may result in immediate revocation of said special inspector's registration card.

16 Note: The balance of Section 1704.1 is implemented as written.

17 Section 7-1-30. SECTION 403 AMENDED

18 Section 403 of the 2010 California Building Code and the 2009 International Building Code is
19 hereby amended to replace the title of Section 403 and amend Sections 403.1, 403.1.1, 403.4.7.2,
20 403.4.8.1 as follows:

21 Section 403. HIGH-RISE BUILDINGS HAVING OCCUPIED FLOORS LOCATED MORE THAN 55 FEET
22 ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS AND GROUP I-2 OCCUPANCIES
23 HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF THE FIRE
24 DEPARTMENT VEHICLE ACCESS.

25 Section 403.1 Applicability. New high-rise building having occupied floors located more than 55
26 feet above the lowest level of fire department vehicle access and new Group I-2 occupancies having

1 occupied floors located more than 75 feet above the lowest level of fire department vehicle access shall
2 comply with Sections 403.2 through 403.6.

3 Note: The balance of Section 403.1 beginning with Exception is implemented as written except
4 Section 403.1.1.

5 Section 403.1.1 Definitions is hereby revised as follows:

6 HIGH RISE BUILDING. In other than Group I-2 occupancies "high-rise buildings" as used by this
7 Code.

- 8 1. "Existing high-rise structure" means a high-rise structure, the construction of which
9 commenced or completed prior to July 1, 1974.
- 10 2. "High-rise structure" means every building of any type of construction or occupancy
11 having floor used for human occupancy located more than 55 feet above the lowest
12 floor level having building access (see Section 403.1.2) except building used as hospitals
13 as defined by the Health and Safety Code Section 1250.
- 14 3. "New high-rise structure" means a high-rise structure, the construction of which
15 commenced on or after July 1, 1974.

16 Note: The balance of Section 403.1.1. is implemented as written.

17 [F] Section 403.4.7.2 Standby power loads. The following are classified as standby power loads:

- 18 1. Power and lighting for the fire command center required by Section 403.4.5;
- 19 2. Standby power shall be provided for elevators in accordance with Sections 1007.4,
20 3003, 3007 and 3008

21 [F] Section 403.4.8.1 Emergency power loads. The following are classified as emergency power
22 loads:

- 23 1. Exit signs and means of egress illumination required by Chapter 10;
- 24 2. Elevator car lighting;
- 25 3. Emergency voice/alarm communication system;
- 26 4. Automatic fire detection systems;

1 5. Fire alarm systems;

2 6. Electrically powered fire pumps; and

3
4 7. Ventilation and automatic fire detection equipment for smokeproof enclosures.

5 Section 7-1-31. SECTION 412.2 AMENDED.

6 Section 412.2 of the 2010 California Building Code and the 2009 International Building Code
7 is hereby amended to add the definitions as follows:

8 Section 412.2 Definitions is hereby amended by adding the following definitions:

9 APPROACH DEPARTURE PATH. The flight path of the helicopter as it approaches or departs
10 from the landing pad.

11 EMERGENCY HELICOPTER LANDING FACILITY (EHLF). A landing area on the roof of a
12 building that is not intended to function as a heliport or helistop but is capable of
13 accommodating fire or medical helicopters engaged in emergency operations.

14 SAFETY AREA. A defined area surrounding the landing pad which is free of obstructions.

15 TAKEOFF AND LANDING AREA. The combination of the landing pad centered within the
16 surrounding safety area.

17 Section 7-1-32. SECTION 412.7 AMENDED

18 Section 412.7 of the 2010 California Building and the 2009 International Building Code is hereby
19 amended to add Sections 412.7.5 through 412.7.5.13 as follows:

20 Section 412.7.5 Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility
21 (EHLF) shall be constructed as specified in Section 412.7.5.1 through 412.7.5.13.

22 Section 412.7.5.1. General. Every building of any type of construction or occupancy having floors
23 used for human occupancy located more than 75 feet above the lowest level of the fire department
24 vehicle access shall have a rooftop emergency helicopter landing facility (EHLF) in a location approved by
25 the fire code official for use by fire, police, and emergency medical helicopters only.

26 Section 412.7.5.2 Rooftop Landing Pad. The landing pad shall be 50 feet by 50 feet or a 50 foot

1 diameter circle that is pitched or sloped to provide drainage away from the access points and passenger
2 holding areas at as slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of
3 approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a
4 maximum gross weight of 15,000 pounds. For structural design requirements, see California Building
5 Code.

6 Section 412.7.5.3 Approach-Departure Path. The emergency helicopter landing facility shall have
7 two approach-departure paths separated in plan from each other by at least 90 degrees. No objects
8 shall penetrate above the approach-departure paths. The approach-departure path begins at the edge
9 of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending
10 outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

11 Section 412.7.5.4 Safety Area. The safety area is a horizontal plane level with the landing pad
12 surface and shall extend 25 feet in all directions from the edge of the landing pad. No objects shall
13 penetrate above the plane of the safety area.

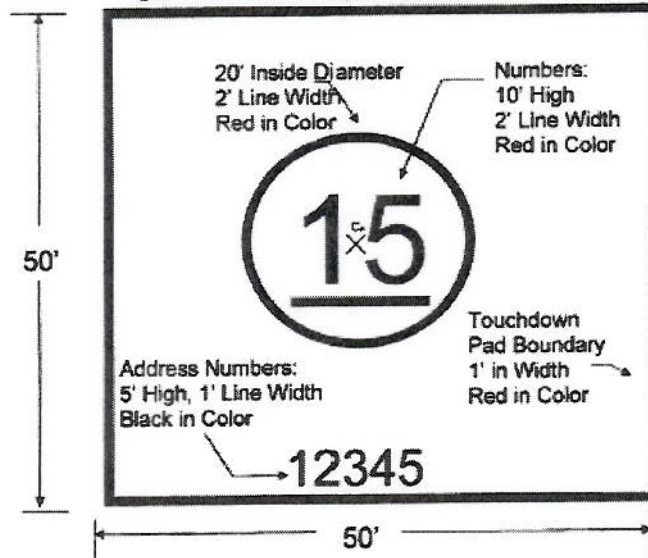
14 Section 412.7.5.5. Safety Net. If the rooftop landing pad is elevated more than 30 inches (2'-6")
15 above the adjoining surfaces, a 6 foot wide horizontal safety net capable of supporting 25 lbs/psf shall be
16 provided around the perimeter of the landing pad. The inner edge of the safety net attached to the
17 landing pad shall be slightly dropped (greater than 5 inches but less than 18 inches) below the pad
18 elevation. The safety net shall slope upward but the outer safety net edge shall not be above the
19 elevation of the landing pad.

20 Section 412.7.5.6 Take-off and Landing Area. The take-off and landing area shall be free of
21 obstructions and 100 feet x 100 feet or 100 feet in diameter.

22 Section 412.7.5.7 Wind Indicating Device. An approved wind indicating device shall be provided
23 but shall not extend into the safety area or the approach-departure path.

24 Section 412.7.5.8 Special Markings. The emergency helicopter landing facility shall be marked as
25 indicated in Figure 412.7.5.8.
26

Figure 412.7.5.8 Helicopter Landing Pad Markings



1. The preferred background is white or tan.
2. The circled, red numbers indicate the allowable weight that the facility is capable of supporting in thousands of pounds.
3. The numbers shall be oriented towards the preferred flight (typically facing the prevailing wind).

Section 412.7.5.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landings areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with CFC 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

Section 412.7.5.10 Standpipe systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area be within 150 feet of a 2.5 inch outlet on a Class I or III standpipe.

Section 412.7.5.11 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area.

1 Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section
2 906.

3 Section 412.7.5.13 EHLF. Fueling, maintenance, repairs, or storage of helicopters shall not be
4 permitted.

5 Section 7-1-33. SECTION 903.2 AMENDED

6 Section 903.2 of the 2010 California Building Code and the 2009 International Building Code is
7 hereby amended to read as follows:

8 [F] Section 903.2 Where required. Approved automatic sprinkler systems in buildings and
9 structures shall be provided in the following locations:

- 10 1. New Buildings: Notwithstanding any applicable portions of Sections 903.2.1 through
11 903.2.12, an automatic fire-extinguishing system shall also be installed in all occupancies
12 when the total building area, as defined in Section 502.1, exceeds 5,000 square feet (465
13 m²), or more than two stories in height, regardless of fire areas or allowable area.
14 *Exception: Group R-3 occupancies. Group R-3 occupancies shall comply with Section*
15 *903.2.8.*
- 16 2. Existing building. Notwithstanding any applicable provisions of this Code, an automatic
17 sprinkler system shall be provided in an existing building when an addition occurs and
18 when one of the following conditions exist.
 - 19 a. When the addition is 33% or more of the existing building area and the resulting
20 building area, as defined by Section 502.1, exceeds 5,000 square feet (465m²); or
 - 21 b. When the addition exceeds 2,000 (185.81m²)square feet and the resulting building
22 area, as defined by Section 502.1, exceeds 5,000 square feet (465m²); or
 - 23 c. An additional story is added above the second floor regardless of fire areas or
24 allowable area.

25 Note: The balance of Section 903.2 beginning with Section 903.2.1 is implemented as written
26

with exception that Section 903.2.8 is amended.

Section 7-1-34. SECTION 902.2.8 AMENDED.

Section 903.2.8 of the 2010 California Building Code and 2009 International Building Code is hereby amended to read as follows:

[F] Section 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area as follows:

1. New Buildings: An automatic sprinkler system shall be installed throughout all new buildings.
2. Existing buildings: All existing buildings shall be equipped with an automatic sprinkler when the alteration or addition meets the following conditions:
 - a. Alteration: When the area of the existing structure is greater than 5,500 square feet and the area of alteration within any two year period exceeds 50% of area of the existing structure.

Exception: When the cost of installing an approved automatic fire sprinkler exceeds 5% of the cost of the alteration, with the approval of the Fire Code Official, the required automatic fire sprinkler system may be omitted.

- b. Addition: The addition and existing building shall be equipped with an automatic sprinkler system when the total square footage of the structure, including any addition greater than 550 square feet, is 5,500 square feet or greater.

Exception: When the cost of installing an approved automatic sprinkler system exceeds 5% of the cost of the addition, with the approval of the Fire Code Official, the required automatic sprinkler system may be omitted.

Note: The balance of Section 903.2.8, beginning with Exceptions, is implemented as written.

Section 7-1-35. SECTION 903.3.1.1.1 AMENDED

Section 903.3.1.1.1 of the 2010 California Building Code and the 2009 International Building Code

1 is hereby amended as follows:

2 [F] Section 903.3.1.1.1 Exempt locations, is hereby amended by revising Exception 4 as follows:

3 Exception:

- 4 3. When approved by the fire code official, spaces or areas in telecommunications buildings
5 used exclusively for telecommunications equipment, and associated electrical power
6 distribution equipment, provided those spaces or areas are equipped throughout with an
7 automatic smoke detection system in accordance with Section 907.2 and are separated
8 from the remainder of the building by fire barriers consisting of not less than 1-hour fire-
9 barriers constructed in accordance with Section 707 or not less than 2-hour horizontal
10 assemblies constructed in accordance with Section 712, or both.

11 Section 7-1-36. SECTION 903.4 AMENDED.

12 Section 903.4 of the 2010 California Building code and the 2009 International Building Code is
13 hereby amended to read as follows:

14 [F] Section 903.4 Sprinkler system supervision and alarms. All valves controlling the water supply
15 for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and
16 water-flow switches on all sprinkler systems shall be electronically supervised by a listed fire alarm
17 control unit.

18 Exceptions:

- 19 1. Automatic sprinkler systems protecting one and two family dwellings.
20 2. Limited area systems serving fewer than 20 sprinklers.
21 3. Jockey pump control valves that are sealed or locked in the open position.
22 4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the
23 open position.
24 5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are
25 sealed or locked in the open position.
26

1 Note: The balance of Section 903.4, beginning with Section 903.4.1., is implemented as
2 written.

3 Section 7-1-37. SECTION 904.3.5 AMENDED.

4 Section 904.3.5 of the 2010 California Building Code and the 2009 International Building Code is
5 hereby amended to read as follows:

6 [F] Section 904.3.5 Monitoring. Where a building fire alarm or monitoring system is installed,
7 automatic fire-extinguishing systems shall be monitored by the building fire alarm or monitoring system
8 in accordance with NFPA 72.

9 Section 7-1-38. SECTION 905.4 AMENDED

10 Section 905.4 of the 2010 California Building Code and the 2009 International Building Code is
11 hereby amended by adding items 7 and 8 as follows:

12 [F] Section 905.4 Location of Class 1 standpipe hose connections. Class 1 standpipe hose
13 connections shall be provided in all of the following locations:

- 14 1. In every required stairway, a hose connection shall be provided for each floor level above
15 or below grade. Hose connections shall be located at an immediate floor level landing
16 between floors, unless otherwise approved by the fire code official. See Section
17 909.20.3.2 for additional provisions in smoke proof enclosures.

- 18 2. On each side of the wall adjacent to the exit opening of a horizontal exit.

19 Exception: Where floor areas adjacent to a horizontal exit are reachable from exit
20 stairway hose connections by a nozzle attached to 100 feet (30 480 mm) of hose, as
21 measured along the path of travel, a hose connection shall not be required at the
22 horizontal exit.

- 23 3. In every exit passageway, at the entrance from the exit passageway to other areas of the
24 building.

25 Exception: Where the floor areas adjacent to an exit passageway are reachable from exit
26

1 stairway hose connections by a 30-foot (9144mm) hose stream from a nozzle attached to
2 100 feet (30 480mm) of hose, a hose connection shall not be required at the entrance
3 from the exit passageway to other areas of the building.

- 4 4. In covered mall buildings, adjacent to each exterior public entrance to the mall and
5 adjacent to each entrance from an exit passageway or exit corridor to the mall.
- 6 5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3
7 percent slope), each standpipe shall be provided with a hose connection located either on
8 the roof or at the highest landing of a stairway with stair access to the roof. An additional
9 hose connection shall be provided at the top of the most hydraulically remote standpipe
10 for testing purposes.
- 11 6. Where the most remote portion of a non-sprinklered floor or story is more than 150 feet
12 (45 720mm) from a hose connection or the most remote portion of a sprinklered floor or
13 story is more than 150 feet (45 720mm) from a hose connection, the fire code official is
14 authorized to require that additional hose connections be provided in approved locations.
15 The distance from a hose connection shall be measured along the path of travel.
- 16 7. The centerline of the 2.5 inches (64mm) outlet shall be no less than 18 inches (457mm)
17 above and no more than 24 inches (610mm) above the finished floor.
- 18 8. Every new building with any horizontal dimensions greater than 300 feet (91 440mm)
19 shall be provided with either access doors or a 2.5 inches (64mm) outlets so that all
20 portions of the building can be reached with 150 feet (45 720mm) of hose from an access
21 door or hose outlet. Required access doors shall be located in the exterior of the building
22 and shall be accessible without the use of a ladder. The door dimensions shall be not less
23 than 3 feet (914mm) in width, and not less than 6 feet 8 inches (2032mm) in height.
24 These doors are for fire department access only.

25 Note: The balance of Section 905.4 is implemented as written.
26

Section 7-1-39. SECTION 907.2.13 AMENDED.

Section 907.2.13 of the 2010 California Building Code and the 2009 International Building Code is hereby amended to read as follows:

[F] Section 907.2.13. High-rise building having occupied floors located more than 55 feet above the lowest level of fire department access and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department vehicle access. High-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department vehicle access shall be provided with an automatic smoke detection in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. *Airport traffic control towers in accordance with Section 907.2.22 and Section 412.*
2. *Open parking garages in accordance with Section 406.3.*
3. *Buildings with occupancy in Group A-5 in accordance with Section 303.1.*
4. *Low-hazard special occupancies in accordance with Section 503.1.1.*
5. *In Group I-2 and R-2-1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system.*

Note: The balance of Section 907.2.13 is implemented as written.

Section 7-1-40. SECTION 907.3.1 AMENDED

Section 907.3.1 of the 2010 California Building Code and the 2009 International Building Code is hereby amended to read as follows:

[F] Section 907.3.1 Duct Smoke Detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected

1 to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke
2 detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall
3 perform the intended fire safety function in accordance with this code and the California Mechanical
4 Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

5 *Exception:*

6 *In occupancies not required to be equipped with a fire alarm system, actuation of a smoke*
7 *detector shall activate a visible and an audible signal in an approved location. Smoke detector*
8 *trouble conditions shall activate a visible and audible signal in an approved location and shall be*
9 *identified as air duct detector trouble.*

10 Section 7-1-41. SECTION 907.5.2.2 AMENDED

11 Section 907.5.2.2 of the 2010 California Building Code and the 2009 International Building Code
12 is hereby amended to read as follows:

13 [F] Section 907.5.2.2 Emergency voice/alarm communication system. Emergency voice/alarm
14 communication system required by this code shall be designed and installed in accordance with NFPA 72.
15 The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall
16 automatically sound an alert tone followed by voice instructions giving approved information and
17 directions for a general or staged evacuation in accordance with the building's fire safety and evacuation
18 plans required by Section 404. In high-rise buildings having occupied floors located more than 55 feet
19 above the lowest level of fire department vehicle access, and Group I-2 occupancies having floors
20 located more than 75 feet above the lowest level of fire department vehicle access, the system shall
21 operate on a minimum of the alarming floor, the floor above and the floor below. Speakers shall be
22 provided throughout the building by paging zones. At a minimum, paging zones shall be provided as
23 follows:
24

- 25 1. Elevator groups
- 26 2. Exit stairways

3. Each floor
4. Areas of refuge as defined in Section 1002.1
5. Dwelling units in apartment houses
6. Hotel guest rooms or suites

Exception: In Group I-1 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

Note: The balance of Section 907.5.2.2 is implemented as written.

Section 7-1-42. SECTION 907.6.3.2 AMENDED

Section 907.6.3.2 of the 2010 California Building Code and the 2009 International Building Code is hereby amended to read as follows:

[F] Section 907.6.3.2 High-rise buildings. High rise buildings having occupied floors located more than 55 feet (16764 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet above the lowest level fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

Section 7-1-43. SECTION 910.3.2.2 AMENDED.

Section 910.3.2.2. of the 2010 California Building Code and the 2009 International Building Code is hereby amended to read as follows

[F] Section 910.3.2.2 Sprinkler buildings. Where installed in buildings provided with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically by actuation of a heat-responsive device rated at least 100° F above operating temperature of the sprinkler unless otherwise approved.

Section 7-1-44 CHAPTER 35 AMENDED

Chapter 35 of the 2010 California Building Code and the 2009 International Building Code is hereby amended to read as follows:

Chapter 35 Referenced Standards is hereby adopted and revised as follows:

NFPA 13, 2010 Edition, Installation of Sprinkler Systems is hereby amended as follows:

Section 6.8.3 is hereby revised as follows:

Section 6.8.3. Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½ inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the chief. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½ inch inlets shall be provided. FDC may be located within 150 feet of a private fire hydrant when approved by the chief.

Section 8.3.3.1 is hereby revised as follows:

Section 8.3.3.1. When the fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Sprinklers in light hazard occupancies shall be one of the follows.

1. Quick-response type as defined in 3.6.4,7
2. Residential sprinklers in accordance with the requirements of 8.4.5.
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing high hazard systems

Section 8.17.1.1.1. is hereby added as follows:

Section 8.17.1.1.1 Residential Waterflow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Section 8.17.2.4.6 is hereby revised as follows:

Section 8.17.2.4.6. Fire department connections shall be on the street side of buildings and shall be located and arranged so that they are immediately adjacent to the approved fire department access road and that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence, posts, or other fire department connections.

Section 11.1.1.2 is hereby added as follows:

Section 11.1.1.2. When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the permit is issued. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

Section 11.2.3.1.1.1 is hereby added as follows:

Section 11.2.3.1.1.1. The available water supply for fire sprinkler system design shall be

determined by one of the following methods, as approved by the Fire Code Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
2. Use a maximum of 40 psi, if available;
3. Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or a professional engineer licensed in the State of California. The result shall be adjusted in accordance with the graduated scaled found in the guidelines.

Section 22.1.3 (43) is hereby revised as follows:

Section 22.1.3 (43). Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

NFPA 13R 2010 Edition installation of sprinkler systems in residential occupancies up to and including four stories in height is hereby amended as follows:

Section 6.16.1 is hereby revised as follows:

Section 6.16.1. A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an

1 uninterruptible circuit (except for over-current protection) serving normally operated appliances in the
2 residence.

3 There shall also be a minimum of one exterior alarm indicating device, listed for outside service
4 and audible from the access roadway that serves the building.

5 Section 6.6.6 is hereby revised as follows:

6 Section 6.6.6. Sprinklers shall not be required in penthouse equipment rooms, elevator machine
7 rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment,
8 crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with
9 ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or
10 intended for living purposes or storage and do not contain fuel fired equipment.

11 Section 6.6.9 is hereby added as follows:

12 Section 6.6.9. Sprinklers shall not be required in attics that are not located over dwelling units.
13 When attics are separated by unit, each unit's attic space may be protected per NFPA 13D, Section
14 8.6.4.2. All other attics shall be protected per NFPA 13.

15 NFPA 13D 2010 Edition installation of sprinkler systems in one and two-family dwellings and
16 manufactured homes is hereby amended as follows:

17 Section 4.1.5 is hereby added as follows:

18 Section 4.1.5 Stock of Spare Sprinklers

19 Section 4.1.5.1. A supply of at least two sprinklers for each type shall be maintained on the
20 premises so that any sprinklers that have operated or been damaged in any way can be promptly
21 replaced.

22 Section 4.1.5.2 is hereby added as follows:

23 Section 4.1.5.2. The sprinklers shall correspond to the types and temperature ratings of the
24 sprinklers on the property.

25 Section 4.1.5.3 is hereby added as follows:
26

1 Section 4.1.5.3. The sprinklers shall be kept in a cabinet located where the temperature to which
2 they are subjected will at no time exceed 100°F (38°C).

3 Section 4.1.5.4 is hereby added as follows:

4 Section 4.1.5.4. A special sprinkler wrench shall be provided and kept in the cabinet to be used
5 in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of
6 sprinkler installed.

7 Section 7.1.2 is hereby revised as follows:

8 Section 7.1.2. The system piping shall not have a separate control valve unless supervised by a
9 central station, proprietary or remote station alarm service.

10 Section 7.3.1 is hereby deleted in its entirety and replaced as follows:

11 Section 7.3.1. At least one water pressure gauge shall be installed on the riser assembly.

12 Section 7.6 is hereby deleted in its entirety and replaced as follows:

13 Section 7.6 Alarms. Exterior alarm indicating device shall be listed for outside service and audible
14 from the street from which the house is addressed. Exterior audible devices shall be placed on the front
15 or side of the structure and the location subject to final approval by the fire code official. Additional
16 interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all
17 sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average
18 ambient sound level but not less than 75 dBA. Audible devices shall be powered from an uninterruptible
19 circuit (except for over-current protection) serving normally operated appliances in the residence.

20 *Exceptions:*

- 21 *1. When an approved water flow monitoring system is installed, interior audible devices may be*
22 *powered through the fire alarm control panel.*
23 *2. When smoke detectors specified under the CBC Section 310.9 are used to sound an alarm*
24 *upon waterflow switch activation.*

25 Section 8.6.4.2 is hereby added as follows:
26

1 Section 8.6.4.2. All attics shall be protected with an intermediate temperature quick response
2 sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical
3 equipment.

4 NEPA 14, 2007 Edition, Installation of Standpipe and Hose Systems is hereby amended as
5 follows:

6 Section 6.4.5.4.1 is hereby deleted in its entirety and replaced as follows:

7 Section 6.4.5.4.1. The fire department connection shall have a minimum of two 2 ½ inches,
8 internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet
9 the system demand. The inlets shall be provided with approved caps to protect the system from entry of
10 debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant.
11 If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet
12 connections shall be painted OSHA safety red.

13 Section 7.3.1.1 is hereby deleted in its entirety and replaced as follows:

14 Section 7.3.1.1 Hose connection height Class I and III standpipe hose connections shall be
15 unobstructed and shall be located not less than 18 inches, or more than 24 inches above the finished
16 floor. Class II standpipe hose connections shall be unobstructed and shall be located not less than 3 feet
17 or more than 5 feet above the finished floor.

18 NFPA 24, 2010. Edition, installation of private fire service mains and their appurtenances is
19 hereby amended as follows:

20 Section 5.9.1.3 is hereby revised as follows:

21 Section 5.9.1.3. The fire department connection shall be of an approved type and contain a
22 minimum of two 2 ½ inch inlets. The location shall be approved and be no more than 150 feet from a
23 public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly.
24 The supply pipe shall be painted OSHA safety red.

25 Section 5.9.1.3.1 is hereby added as follows:
26

1 Section 5.9.1.3.1. When the sprinkler density design is 500 gpm (including the interior hose
2 stream demand) or greater, or a standpipe system is included, four 2 ½ inlets shall be provided.

3 Section 5.9.1.3.2 is hereby added as follows:

4 Section 5.9.1.3.2. The fire department connection (FDC) may be located with 150 feet of a
5 private fire hydrant provide FDC connects down-stream of an aboveground sprinkler system check valve.

6 Section 6.2.1.1 is hereby added as follows:

7 Section 6.2.1.1. The closest upstream indicating valve to the riser shall be OSHA red.

8 Section 6.2.11 (5) is hereby deleted without replacement.

9 Section 6.2.11 (6) is hereby revised as follows:

10 Section 6.2.11 (5) Control valves in a one-hour fire-rated room accessible from the exterior.

11 Section 6.2.11 (7) is hereby deleted without replacement.

12 Section 6.3.3 is hereby added as follows;

13 Section 6.3.3. All post indicator valves controlling fire suppression water supplies shall be a
14 painted OSHA red.

15 Section 10.1.6.3 is hereby added as follows:

16 Section 10.1.6.3. All ferrous pipe shall be coated and wrapped. Joints shall be coated and
17 wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of
18 the tube shall extend past the joint by a minimum of 12 inches and be sealed with a 2 inch wide tape
19 approved for underground use. Galvanizing does not meet the requirements of this section.

20 Exception: 316 Stainless steel pipe and fittings.

21 Section 10.3.5.2 is hereby revised as follows:

22 Section 10.3.5.2. All bolted joint accessories shall be cleaned and thoroughly coated with asphalt
23 or other corrosive-retarding material, prior to poly-tube, and after installation.

24 Section 10.3.5.3 is hereby added as follows:

25 Section 10.3.5.3. All bolts used in pipe-joint assembly shall be 316 stainless steel.
26

Section 10.6.3.1 is hereby revised as follows:

Section 10.6.3.1. Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 18 inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or comply with 10.6.2.

Section 10.6.5 is hereby revised as follows:

Section 10.6.5. Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain any mechanical joints.

NFPA 72, 2010 Edition National Fire Alarm Code

Section 14.2.1.2.3 is hereby revised as follows:

Section 14.2.1.2.3. If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner' designated representative and fire code official shall be informed of the impairment in writing within 24 hours.

Section 23.8.2 Fire alarm control units is revised as follows:

Section 23.8.2. Except as permitted in 23.8.2.3, the fire alarm system components shall be permitted to share control equipment or shall be able to operate as stand-alone subsystems, but in any case, they shall be arranged to function as a single system and sent a single signal to a central, remote, or proprietary station.

Section 23.8.2.3 is hereby deleted without replacement.

Section 26.2.3.1 is hereby amended by modifying the start paragraph as follows:

Section 26.2.3.1. Supervising station customers or clients and the fire code official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

Section 7-1-45. SECTION 3109 ADOPTED AND AMENDED

Section 3109 of the California Building Code, and 2009 International Building Code is hereby

adopted and amended to read as follows:

Section 3109 SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

Section 3109.1 General. Swimming pools shall comply with the requirements of this section and other applicable sections of this Code.

Section 3109.2 Definitions. The following word and term shall, for the purpose of this section and as used elsewhere in this Code, have the meaning shown herein.

SWIMMING POOLS. Any structure intended for swimming, recreational bathing or wading that contains water over 18 inches (457.2mm) deep. This includes in-ground, above-ground and on-ground pools; spas and fixed-in-place wading pools. See Section 3102B for definition of private pools and public pools.

Section 3109.3 Public swimming pools. Public swimming pools shall comply with Chapter 31B.

Section 3109.4 Private swimming pools. Private swimming pools shall comply with Section 3109.4.1 through 3109.4.3.

Section 3109.41 Barrier height and clearances. The top of the barrier shall be at least 60 inches (1524mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102mm),

Note: The balance of Section 3109, beginning with Section 3109.4.11 is implemented as written, except Section 3109.4.2 is deleted.

Section 7-1-46 SECTION 3405.2.4 ADDED

Section 3405.2 of the 2010 California Building Code and 2009 International Building Code is amended by adding Section 3405.2.4 to read as follows:

Section 3405.2.4 Seismic evaluation and design procedures for repairs. The seismic evaluation and design shall be based on the procedures specified in the California Building Code, ASCE 31 Seismic Evaluation of Existing Buildings (for evaluation only) or ASCE 41 Seismic Rehabilitation of Existing Buildings. The procedures contained in Appendix A of the International Existing Building Code shall be permitted to be used as specified in Section 3403.5.1.1.3.

Section 3405.2.4.1 Compliance with CBC level seismic forces. Where compliance with the seismic design provisions of the California Building Code is required, the procedures shall be in accordance with one of the following:

1. One-hundred percent of the values in the California Building Code. Where the existing seismic force-resisting system is a type that can be designated as "Ordinary", the values of R_7 , Ω_0 and C_d for analysis in accordance with Chapter 16 of the California Building Code shall be those specified for structural systems classified as "Ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it is demonstrated that the structural system will provide performance equivalent to that of a "Detailed", "Intermediate" or "Special" system
2. Compliance with ASCE 41 using both BSE-1 and BSE-2 earthquake hazard levels and the corresponding performance levels in Table 3405.2.4.1.

TABLE 3405.2.4.1

PERFORMANCE CRITERIA FOR CBC LEVEL SEISMIC FORCES

OCCUPANCY CATEGORY (BASED ON CBC TABLE 1604.5)	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-1 EARTHQUAKE HAZARD LEVEL	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-2 EARTHQUAKE HAZARD LEVEL
I	Life Safety (LS)	Collapse Prevention (CP)
II	Life Safety (LS)	Collapse Prevention (CP)
III	Note a	Note a
IV	Immediate Occupancy (IO)	Life Safety (LS)

- a. Acceptance criteria for Occupancy Category III shall be taken as 80 percent of the acceptance criteria specified for Occupancy Category II performance levels, but

not need be less than the acceptance criteria specified for Occupancy Criteria IV performance levels.

Section 3405.2.4.2 Compliance with reduced CBC level seismic forces. Values where seismic evaluation and design is permitted to meet reduced California Building Code seismic force levels, the procedures used shall be as in accordance with one of the following:

1. The California Building Code using 75 percent of the prescribed forces. Values OF R_7 , Ω_0 , and C_d used for analysis shall be as specified in Section 3405.2.4.1., Item 1.
2. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A of the International Existing Building Code as specified in Items 2.1 through 2.5 below shall be deemed to comply with this section.
 - 2.1 The seismic evaluation and design of unreinforced masonry bearing wall buildings in Occupancy Category I and II are permitted to be based on the procedures specified in Appendix Chapter A1.
 - 2.2 Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A2.
 - 2.3 Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A3.
 - 2.4 Seismic evaluation and design of soft, weak, or open-front walls conditions in multiunit residential buildings of wood construction in Occupancy Category I or II are permitted based on the procedures specified in Appendix Chapter A4.
 - 2.5 Seismic evaluation and design of concrete buildings in all Occupancy Categories are permitted to be based on the procedures specified in Appendix Chapter A5.

3. Compliance with ASCE 31 based on the applicable performance level as shown in Table 3405.2.4.2. It shall be permitted to use the BSE-1 earthquake hazard level as defined in ASCE 41 and subject to the limitations in item 4 below.
4. Compliance with ASCE 41 using the BSE-1 Earthquake Hazard Level defined in ASCE 41 and the performance level as shown in Table 3405.2.4.2. The design spectral response acceleration parameters S_{xs} and S_{x1} specified in ASCE 41 shall not be taken less than 75 percent of the respective design spectral response acceleration parameters S_{Ds} and S_{D1} defined by the California Building Code and its reference standards.

TABLE 3405.2.4.2

PERFORMANCE CRITERIA FOR REDUCED CBC

LEVEL SEISMIC FORCES

OCCUPANCY CATEGORY (BASED ON CBC TABLE 1604.5)	PERFORMANCE LEVEL FOR USE WITH ASCE 31	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-1 EARTHQUAKE HAZARD LEVEL
I	Life Safety (LS)	Life Safety (LS)
II	Life Safety (LS)	Life Safety (LS)
III	Note a, Note b	Note a
IV	Immediate Occupancy (IO)	Immediate Occupancy (IO)

- a. Acceptance criteria for Occupancy Category III shall be taken as 80 percent of the acceptance criteria specified for Occupancy Category II performance levels, but need not be less than the acceptance criteria specified for Occupancy Category IV performance levels.
- b. For Occupancy Category III, the ASCE screening phase checklists shall be based on the life safety performance level.

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Section 3405.2.4.3 Referenced Standards

Standard Reference Number	Title	Reference in Code Section Number
ASCE 31-03	Seismic Evaluation of Existing Buildings	3405.2.4.1 TABLE 3405.2.4.1. 3405.242 TABLE 3405.2.4.2
ASCE 41-06 Including Supplement NO. 1	Seismic Rehabilitation of Existing Buildings	3405.2.4.1 TABLE 3405.2.4.1 3405.2.4.2 TABLE 3405.2.4.2.

Section 7-1-47. TABLE R301.1(1) AMENDED

Table R301.2 (1) is revised to read

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^a	ICE BARRIER UNDERLAYMENT REQUIRED ^b	FLOOD HAZARDS ^c	AIR FREEZING INDEX ^d	MEAN ANNUAL TEMP ^e
	SPEED ^a (mph)	Topographic effects ^b		Weathering ^a	Frostline Depth ^b	Termite ^c					
Zero	85	NO	D ₁ or E	Negligible	12-24"	Very Heavy	43	NO	See Table A	0	60

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this Code. The weathering column shall be filled in with the weathering index (i.e. "negligible", "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from the ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1 (1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite

1 damage.

- 2 d. The jurisdiction shall fill in this part of the table with the wind speed from the basic
3 wind speed map [Figure R301.2(4)] Wind exposure category shall be determined on
4 a site-specific basis in accordance with Section R301.2.1.4.
- 5 e. Temperatures shall be permitted to reflect local climates or local weather experience
6 as determined by the Building Official.
- 7 f. The jurisdiction shall fill in this part of the table with the seismic design category
8 determined from Section R301.2.2.1.
- 9 g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's
10 entry into the National Flood Insurance Program (date of adoption of the first code
11 or ordinance for management of flood hazard areas), (b) the date(s) of the Flood
12 Insurance Study and (c) the panel numbers and dates of all currently effective
13 FIRMs and FBFMs or other flood hazard map adopted by the authority having
14 jurisdiction, as amended.
- 15 h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1,
16 R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from
17 the effects of ice damming, the jurisdiction shall fill in this part of the table with
18 "YES". Otherwise, the jurisdiction shall fill in this part of the table with "NO".
- 19 i. The jurisdiction shall fill in this part of the table with the 100-year return period air
20 freezing index (BF-days) from Figure R403.3 (2) or from the 100-year (99%) value
21 on the National Climatic Data Center data table "Air Freezing Index-USA Method
22 (Base 32°F) at www.ncdc.noaa.gov/fpsf.html.
- 23 j. The jurisdiction shall fill in this part of the table with the mean annual temperature
24 from the National Climatic Data Center data table "Air Freezing Index-USA Method
25 (Base 32°F) at www.ncdc.noaa.gov/fpsf.html.
26

k. In accordance with Section R301.2.1.5 where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES". Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

TABLE A

<i>Community Name</i>	<i>Community Number</i>	<i>Located on Panels</i>	<i>Initial NFIP Map Date</i>	<i>Initial Firm Date</i>	<i>Most Recent Firm Panel Date</i>
Orange County Unincorporated Areas	060212	28, 29, 33, 34 ¹ , 38, 42, 55 ¹ , 58, 59 ¹ , 61, 62, 63, 64, 66, 67 ¹ , 68, 69, 90, 95, 108, 112, 113, 114, 116, 117, 118, 129, 136, 137, 138, 151, 153, 154, 156, 157, 158, 159, 162, 164, 166, 167, 168, 169, 180, 185, 190, 195, 225 ¹ , 226, 227, 229, 231, 233, 234, 241, 242, 251, 256, 264, 267, 269, 277, 278, 281, 282, 286, 294, 305, 306, 307, 308 ¹ , 309, 315, 316, 317, 326, 327, 328, 329 ¹ , 335, 336, 337, 338, 339, 345, 375 ¹ , 377, 404, 406 ¹ , 407, 408, 409, 412, 416, 417, 419, 426, 428, 432, 434, 436, 438, 441, 442, 444, 451, 452, 453, 454, 460, 465, 470, 500, 526, 527 ¹ , 529 ¹ , 535 ¹	1/10/75	9/14/79	12/3/09

¹ PANEL NOT PRINTED – NO SPECIAL FLOOD HAZARD AREAS

Section 7-1-48. SECTION R313.1 AMENDED

Section R313.1 of the 2010 California Residential Code is hereby amended to read as follows:

Section R313.1. Townhouse Automatic Fire Sprinkler Systems. Fire sprinkler systems shall be provided as required under Section 903.2.8 of the California Building Code with amendments by County Ordinance.

Note: The balance of Section R313.1, beginning with Section R313.1.1. is implemented as written.

Section 7-1-49. SECTION R313.2 AMENDED

Section R313.2 of the 2010 California Residential Code is hereby amended to read as follows:

Section R313.2. One and Two Family Dwellings Automatic Fire Sprinkler Systems. Fire sprinkler systems shall be provided as required under Section 903.2.8 of the California Building Code with

1 amendments by the County Ordinance.

2 Note: The balance of Section R313.2, beginning with Section R313.2.1 is implemented as
3 written.

4 Section 7-1-50. SECTION R403.1.3 AMENDED

5 Section R403.1.3 of the 2010 California Residential Code is hereby amended to read as follows:

6 Section R403.1.3 Seismic Reinforcing. Concrete footings located in Seismic Design Categories D₀,
7 D₁, and D₂ as established in Table R301.2(1), shall have minimum reinforcement. Bottom reinforcement
8 shall be located a minimum of 3 inches (76mm) clear of the bottom of the footing.

9 In Seismic Design Categories D₀, D₁, D₂ where a construction joint is created between a concrete
10 footing and a stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet
11 (1219mm) on center. The vertical bar shall extend to 3 inches (76mm) clear of the bottom of the
12 footing, have a standard hook and extend a minimum of 14 inches (357mm) into the stem wall.

13 In Seismic Design Categories D₀, D₁ and D₂, where a grouted masonry stem wall is supported on
14 a concrete footing and stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet
15 (1219mm) on center. The vertical bar shall extend to 3 inches (76mm) clear of the bottom of the
16 footing and have a standard hook.

17 In Seismic Design Categories D₀, D₁ and D₂ masonry stem walls without solid grout and vertical
18 reinforcing are not *permitted*.

19 Note: The balance of Section R403.1.3, beginning with Section R403.1.3.1 is implemented as
20 written.

21 Section 7-1-51. SECTION R405.1 AMENDED

22 Section R405.1 of the 2010 California Residential Code is hereby amended to read as follows:

23 Section R405.1 Concrete or masonry foundations. Drains shall be provided around all concrete or
24 masonry foundations that retain earth and enclose habitable or usable spaces located below grade.
25 Drainage tiles, gravel, or crushed stone rains, perforated pipe or other approved systems or materials
26

shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305mm) beyond the outside edge of the footing and 6 inches (152mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51mm) of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152mm) of the same material.

Note: The balance of Section 405.1, beginning with Section 405.1.1 is implemented as written.

Section 7-1-52. SECTION R902.1 REPLACED

Section R902.1 of the 2010 California Residential Code is hereby amended to read as follows:

Section R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Section R904 and R905. A minimum Class A,B or C roofing shall be installed in areas designated by this section. Classes A,B and C roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

Exceptions:

1. *All new buildings and additions shall be minimum Class B roof.*
2. *Re-roofing, repairs or replacements on buildings shall be of the same classification as the original roof except that non-rated and Class C roofs shall be a minimum Class C.*
3. *When any re-roofing, repair or replacement to an existing roof exceeds 40 percent of the roof area, the entire roof shall be replaced with a minimum Class B roof.*
4. *Roofing on buildings located within Wildland – Urban Interface Fire Area shall be Class A and meet additional requirements of Chapter 7A of the California Building Code.*

For the design of fasteners for tile roofing materials, the unincorporated area of the County shall be considered as a "Special Wind Region" with a basic wind speed over 80 miles per hour.

Note: The balance of Section R902.1, beginning with Section R902.1.1 is implemented as

written.

Section 7-1-53. CHAPTER 44 AMENDED

Chapter 44 Referenced Standards of the 2010 California Residential Code is hereby adopted in its entirety with the same amendments for Chapter 35 Reference Standards of the 2010 California Building Code.

Section 7-1-54. SECTION 202 AMENDED

Section 202 of the 2010 California Green Building Standards Code is hereby amended to add a definition to read as follows:

Sustainability. Consideration of present development and construction impacts on the community, the economy, and the environmental without compromising the needs of the future.

Section 7-1-55. SECTION 4.304.1 AMENDED

Section 4.304.1 of the 2010 California Green Building Standards Code is hereby amended to read as follows;

Section 4.304.1. Irrigation controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and shall comply with the following:

1. Controllers shall be weather or soil moisture-based irrigation controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Note: More information regarding irrigation controller function and specifications is available from the Irrigation Association.

This ordinance shall take effect and be in full force thirty (30) days from and after its passage and before the expiration of fifteen (15) days after the passage thereof, shall be published once in an adjudicated newspaper in the County of Orange.

THE FOREGOING was **PASSED** and **ADOPTED** by the following vote of the Orange County Board of Supervisors on January 25, 2011, to wit:

AYES: Supervisors: PATRICIA BATES, JANET NGUYEN, JOHN M. W. MOORLACH
SHAWN NELSON, BILL CAMPBELL

NOES:

EXCUSED:

ABSTAINED:

Bill Campbell

CHAIRMAN

STATE OF CALIFORNIA)
) ss:
COUNTY OF ORANGE)

I, DARLENE J. BLOOM, Clerk of the Board of Orange County, California, hereby certify that a copy of this document has been delivered to the Chairman of the Board and that the above and foregoing Ordinance was duly and regularly adopted by the Orange County Board of Supervisors.

IN WITNESS WHEREOF, I have hereto set my hand and seal.

Darlene J. Bloom

DARLENE J. BLOOM
Clerk of the Board.
County of Orange, State of California



Ordinance No.: 11-001
Agenda Date: 01/25/2011
Item No.: 48



I certify that the foregoing is a true and correct copy of the Ordinance adopted by the Board of Supervisors, Orange County, State of California

DARLENE J. BLOOM, Clerk of the Board of Supervisors

By: _____
Deputy